



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,488	02/11/2002	George Jyh-Shann Chou	17714 (MHM 13417US01)	6030

7590 10/10/2003

Tyco Electronics Corporation
307 Constitution Drive
MS R20/2B
Menlo Park, CA 94025

EXAMINER

WYSZOMIERSKI, GEORGE P

ART UNIT	PAPER NUMBER
----------	--------------

1742

DATE MAILED: 10/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/073,488

Applicant(s)

CIOCIRLAN ET AL.

Examiner

George P Wyszomierski

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 19-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 13 and 16 is/are rejected.
- 7) ☒ Claim(s) 4-12, 14, 15, 17 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 1742

1. Applicant's affirmation of the election without traverse of Group I, claims 1-18 in Paper No. 5 is acknowledged.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (PG Publication 2001/0009724) in view of any of Hogg (U.S. Patent 4,390,377), Arnaud et al. (U.S. Patent 6,093,267), or JP 11-289645, for reasons of record in the prior Office Action (Paper no. 4).

Briefly, Chen et al. discloses a process which includes coating and heat treating conductive wires in order to relieve stress and improve the mechanical properties of the final product, which products are to be used as conductive contacts in electronic applications. While Chen does not disclose induction heating as a method of heat treatment, each of the secondary references indicates that it is well-known in the art to heat treat coated wires by an induction heating process. The Hogg and Arnaud patents further state that one purpose of the heat treatment is to relieve stress in the coated wires.

Based upon these disclosures of Hogg, Arnaud, or JP '645, it would have been an obvious expedient to one of ordinary skill in the art to employ induction heating as the heat treatment step in the Chen et al. process.

4. Claims 3 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. in view of Hogg, Arnaud et al., or JP 11-289645, as set forth above, or over this combination of references and further in view of Evans (U.S. Patent 5,350,467).

The prior art as set forth in the preceding section does not disclose heating different portions of the heat treated materials by different amounts, as required by the instant claims.

The examiner's position is that:

a) Such a feature would be inherent in any practical heat treatment process such as those of Chen, Hogg, Arnaud, or JP '645, i.e. inevitably some portion of the treated product will be closer to the heating source than other portions and therefore the two portions will be heated by different amounts, and

b) The Evans patent indicates it to be conventional in the art to perform an induction heat treatment process in such a manner that one differentially heat treats different portions of the objects being heated.

Therefore, the features as presently claimed would either be inherent in the process of Chen combined with that of Hogg, Arnaud, or JP '645, or would be considered well-known by one of ordinary skill in the induction heat treating art, as evidenced by Evans.

5. In a response filed September 17, 2003, Applicant alleges that because the products treated by Hogg, Arnaud, and JP '645 are different from those of Chen, that it would not have been obvious to modify the Chen process to include the induction heating of the secondary references. The examiner respectfully disagrees. The examiner's position is that the induction heating process is a generic heat treatment method, applied to a wide variety of materials, such as those of Hogg, Arnaud, or JP '645. Indeed, within the USPTO's classification system, class 148, subclasses 567 thru 575 are drawn to the treatment of metallic materials by induction, with

Art Unit: 1742

subclass 568 (which is within the fields of search of the present application) being drawn specifically to the treatment of wires or filaments by induction. The cited Hogg, Arnaud, and JP '645 references denote examples of the treatment of coated wires by an induction process, for purposes analogous to that of Applicant in the claimed invention. Given that the induction treatment process and its application to wires was so well-known in the art prior to the invention that the Office has seen fit to draw specific subclasses to such processes, and given further that it was known in the art to apply this process to treating coated wires (as evidenced by Hogg, Arnaud, and JP '645), the examiner's position is that it would have been considered an obvious expedient to one of ordinary skill in the art to utilize an induction process to heat treat the coated wires in the Chen et al. process.

6. Claims 4-12, 14, 15, 17 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 1742

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Wyszomierski whose telephone number is (703) 308-2531. The examiner can normally be reached on Monday thru Friday from 8:00 a.m. to 4:30 p.m. Eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on (703) 308-1146. Effective October 1, 2003, all patent application related correspondence transmitted by facsimile must be directed to the central facsimile number, (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.



GEORGE WYSZOMIERSKI
PRIMARY EXAMINER

GPW
October 7, 2003